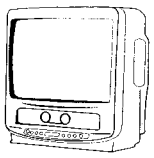
THOMSON MULTI MEDIA

Brandt FERGUSON **NORDMENDE** SABA **TELEFUNKEN** **THOMSON**



SERVICE MANUAL
DOCUMENTATION TECHNIQUE
TECHNISCHE DOKUMENTATION
DOCUMENTAZIONE TECNICA
DOCUMENTACION TECNICA

EUROPE COMBO

F14VB12A
S14VB12A
S14VB22A
S20VB12A
S20VB22A
T14VB12A
T14VB12B
T14VB12C
T14VB22A

PROVISIONAL DOCUMENT
DOCUMENT PROVISOIRE
PROVISORISCHES DOKUMENT
DOCUMENTO PROVVISIORO
DOCUMENTO PROVISIONAL

MC-Service

WARNING : *Before servicing this set read the safety recommendations.*
ATTENTION : *Avant toute intervention sur cet appareil, lire les recommandations de sécurité.*
ACHTUNG : *Bei jedem Eingriff im Gerät, die Sicherheitsvorschriften beachten.*
ATTENZIONE : *Prima di intervenire sull'apparecchio, leggere le norme di sicurezza.*
IMPORTANTE : *Antes de cualquier intervención, leer las recomendaciones de seguridad.*

Code : 350 440 00 - 0697 / 3,7 - EURO COMBO Print. ROSSEELS PRINTING : 01 53 01 11 11

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TECHNICAL DATA - CARACTERISTIQUES PRINCIPALES - TECHNISCHE DATEN
DATI TECNICI - CARACTERISTICAS DEL APARATO

Type of set :	Color receiver with 99+AV program control.
Type d'appareil :	Récepteur couleur à télécommande 99+AV programmes.
Geräteart :	Farbfernseher mit 99+AV Programmplâtzen.
tipo d'apparecchio :	ricevitore a colori con telecomando 99+AV programmi.
Tipo de aparato :	Receptor color con mando 99+AV programas.

Standards received :	Standard	according to model	
Standards reçus :	Norme	selon modele	PAL I
Empfangs - Standard :	Norm	gemäß modell	PAL BG
standard ricevuti :	norma	Secondo modello	PAL/SECAM BG-LL'-DKK'
Recepción :	Norma	segun modelo	

Sound :	
Audio :	
Ton :	MONO
Audio :	
Audio :	

Colour decoding system :	according to model	
Système de décodage couleur :	selon modele	PAL
Farbsystem :	gemäß modell	PAL/SECAM
sistema di decodifica colore :	Secondo modello	MESECAM
Sistema de decodificación color :	segun modelo	

Channel selection :	Selection of 99+AV programs by remote control with frequency synthesis.
Sélection des programmes :	Sélection des 99+AV programmes par télécommande à synthèse de frequence.
Programmwahl :	Wahl der 99+AV programme über Fernbedienung mit Freqenzsynthese.
selezione del programmi :	selezione del 99+AV programmi con telecommando a sintesi di freqenza.
Selección de los programas :	Selecciôn de 99+AV programas por telemando sintesis de frecuencia.

Cathode ray tube 90 ° :	according to model	
Tube cathodique 90 ° :	selon modele	
Bildröhre 90 ° :	gemäß modell	14" - 20"
tubo catodico 90 ° :	Secondo modello	
Tubo catódico 90 °:	segun modelo	

1 LS for 14"
2 LS for 20"

Z = 8 Ω mini

Sound power :		for 10 % distortion.
Puissance du son :	2,5 W RMS (14")	pour une distorsion de 10 %.
Ausgangsleistung :	3 W RMS (20")	Klirrfaktor 10 %.
potenza del suono :		per una distorsione del 10 %.
Potencia del sonido :		para una distorsion del 10 %.

Power supply :		Power consumption :	
Alimentation :		Consommation :	
Stromversorgung :	220 / 240 V - 50 Hz	Leistungsaufnahme :	< 15 W (stby)
alimentazione :		Consumo :	
Alimentación :		Consumo :	

VCR

Mechadeck mounting:	Center - Full loading
Rewind time:	105s (E180)
Video heads:	2 H, 2HLP for UK
Tape format:	VHS HQ
Color standards:	PAL - PAL/SECAM - NTSC (Playback)
Timer:	8 events / 1 year - Showview - Video + - PDC - VPS
Power back up:	> 30 minutes
Tape speed:	SP - SP/LP (UK)
Special effects:	Still picture - Slow motion - Frame advance - Variable search
Tracking:	Digital Auto and manual

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VIDEOVISION
First issue 06 / 97

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MC-Service

SPECIFICHE

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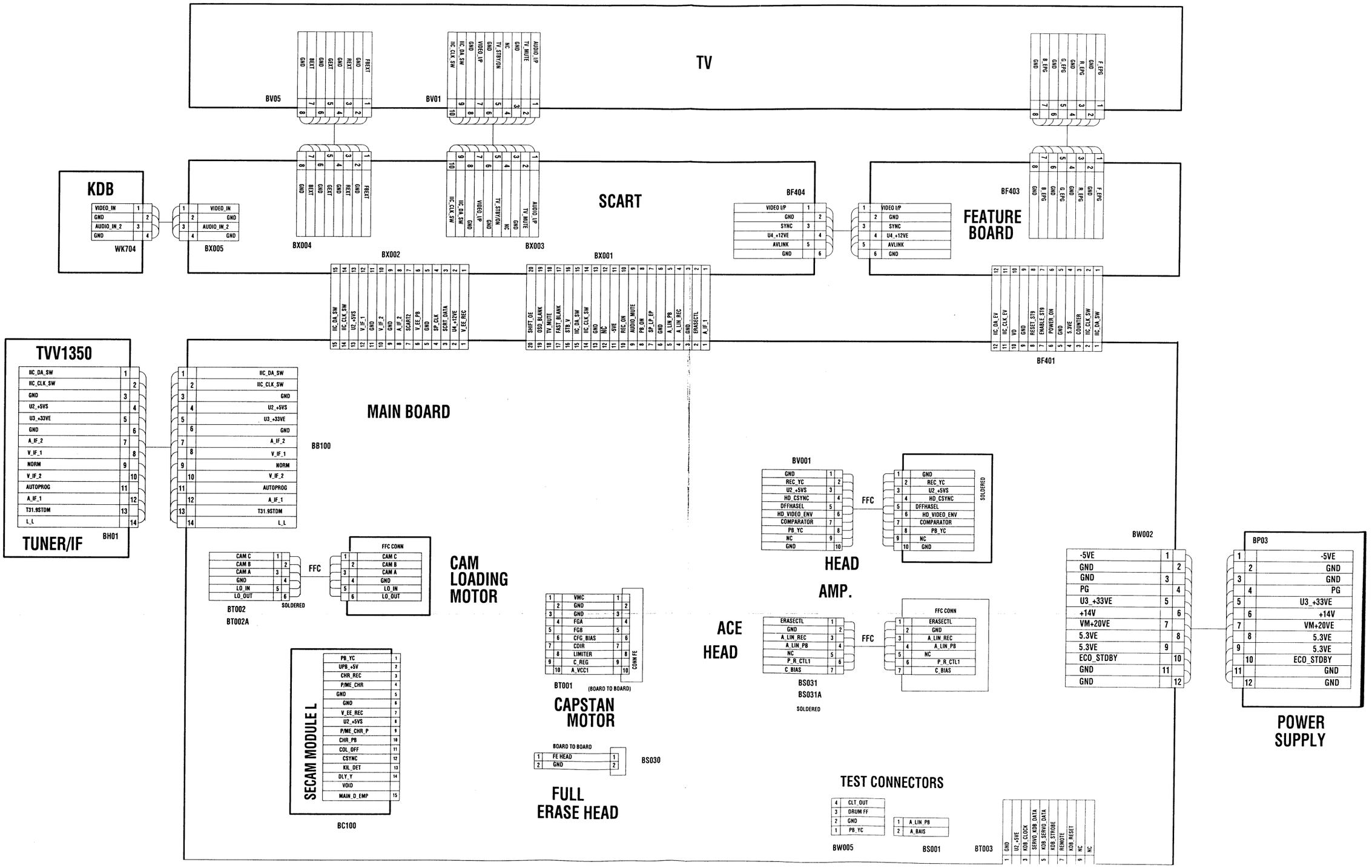
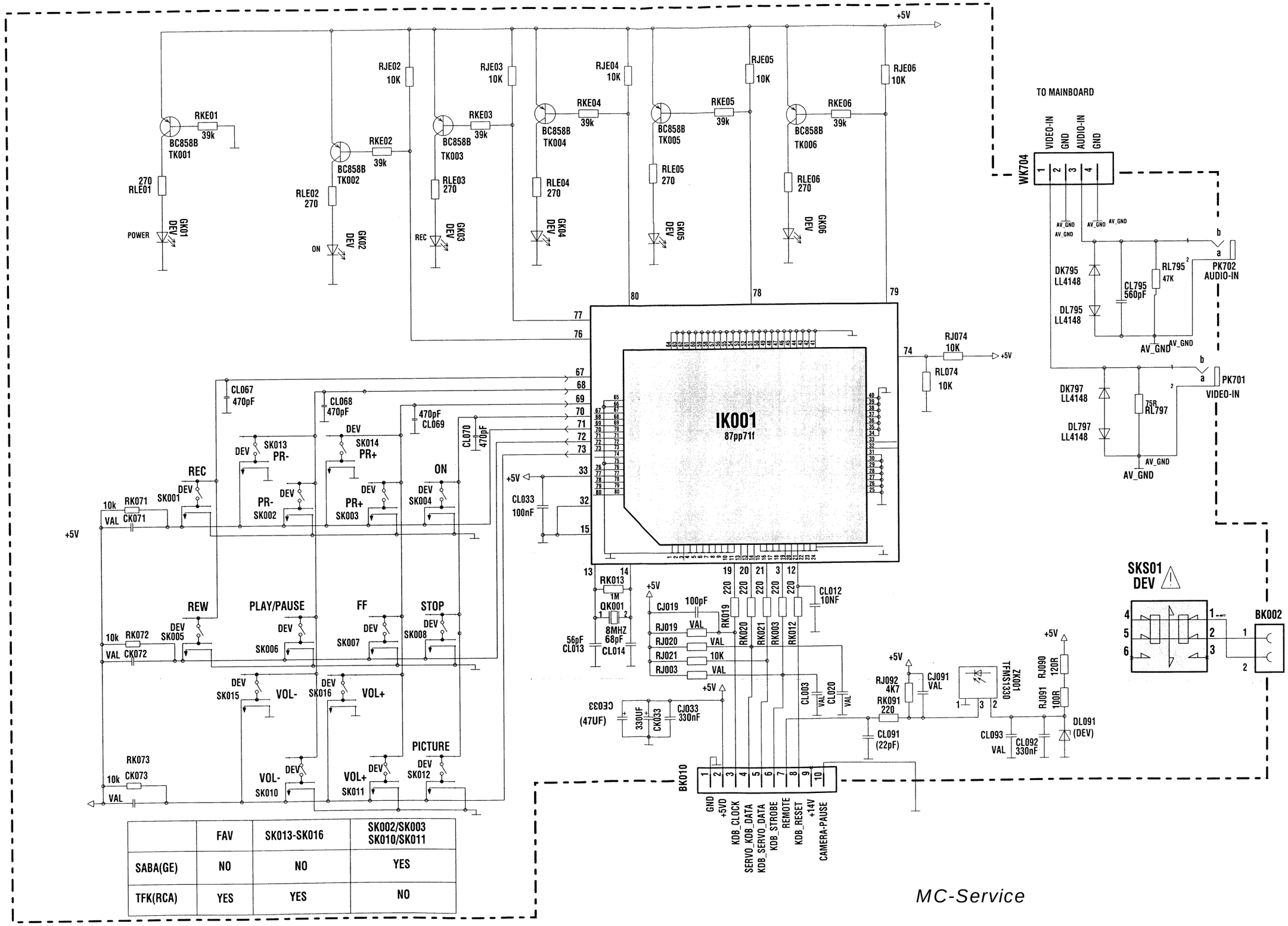
WIRING DIAGRAM - SCHEMA D'INTERCONNEXIONS - VERDRAHTUNGSPLAN - DIAGRAMMA DELLE INTERCONNESSIONI - ESQUEMA DE INTERCONEXIONES



KEYBOARD - PLATINE DE COMMANDES - BEDIENTEIL - TASTIERA - PLATINA MANDOS



	FAV	SK013-SK016	SK002/SK003 SK010/SK011
SABA(GE)	NO	NO	YES
TFK(RCA)	YES	YES	NO

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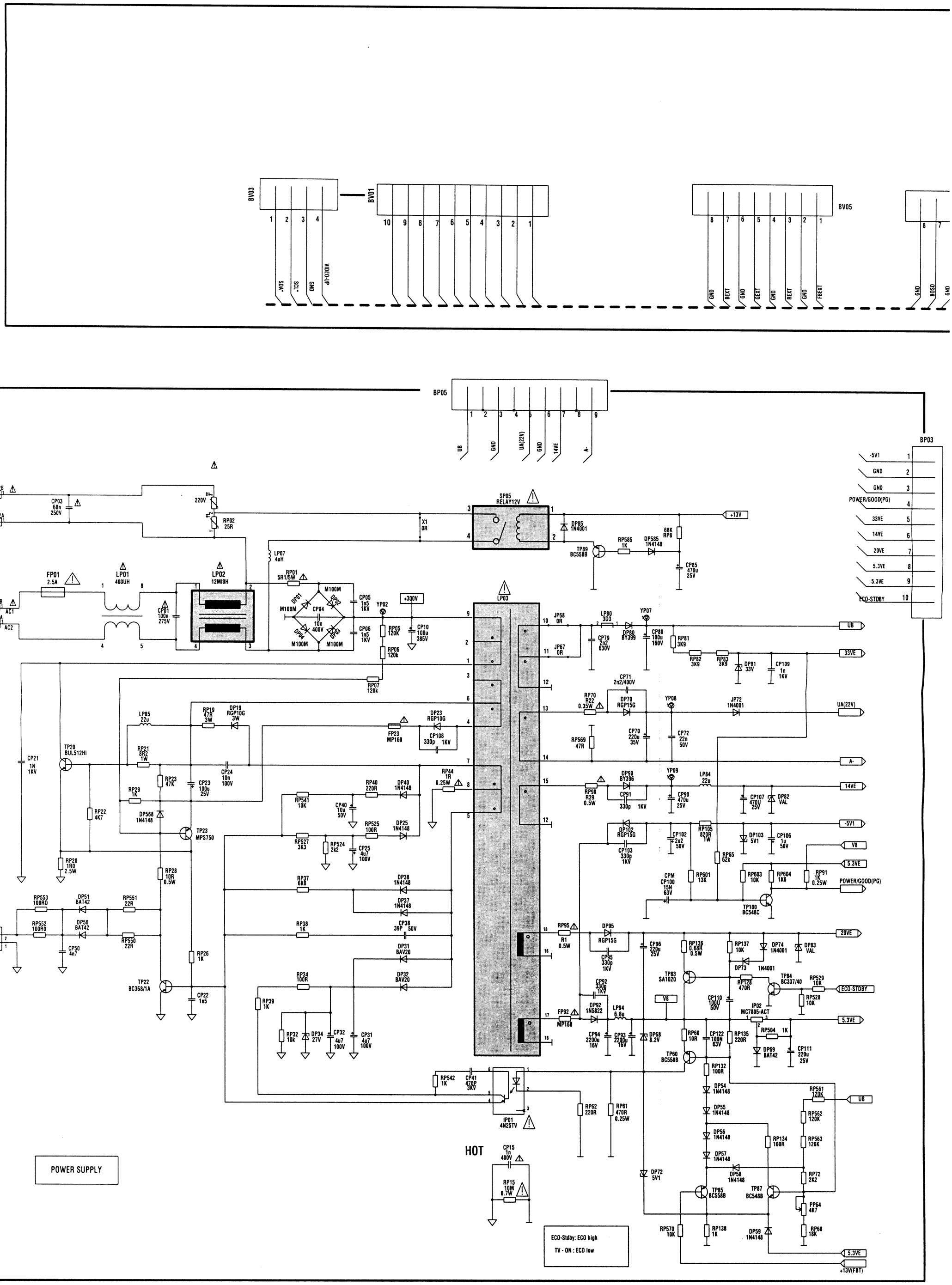
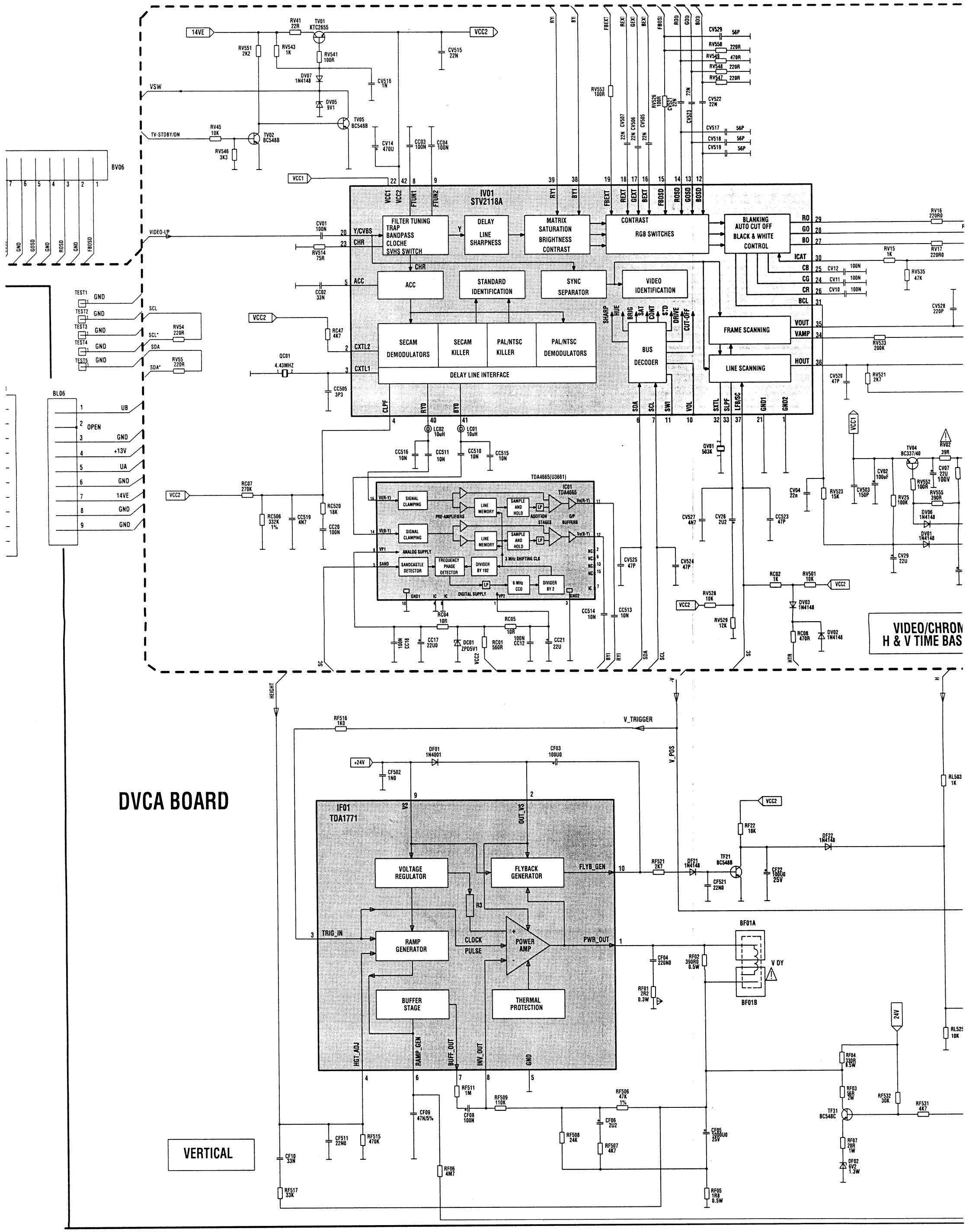
TV CIRCUITS SCHEMATIC DIAGRAM - SCHEMA DES CIRCUITS PARTIE TV - FERNS



SEHGERÄTSCHALTUNG - CIRCUITI PARTI TV - CIRCUITOS SECTION TV


14VE
VCC2
VCC1
VSW
TV-STDBY/ON
VIDEO-I/P
BV06
BL06
IV01
STV2118A
FILTER TUNING
TRAP
BANDPASS
CLOCHE
SVHS SWITCH
DELAY
LINE
SHARPNESS
MATRIX
SATURATION
BRIGHTNESS
CONTRAST
CONTRAST
RGB SWITCHES
BLANKING
AUTO CUT OFF
BLACK & WHITE
CONTROL
ACC
STANDARD
IDENTIFICATION
SYNC
SEPARATOR
VIDEO
IDENTIFICATION
SECAM
DEMODULATORS
SECAM
KILLER
PAL/NTSC
KILLER
PAL/NTSC
DEMODULATORS
DELAY LINE INTERFACE
BUS
DECODER
FRAME SCANNING
LINE SCANNING
QC01
4.43MHZ
TEST1
TEST2
TEST3
TEST4
TEST5
GND
SCL
SCL*
SDA
SDA*
RV54
220R
RV55
220R
UB
OPEN
+13V
UA
TDA4665(U3661)
IC01
TDA4665
SIGNAL
CLAMPING
PRE-AMPLIFIERS
LINE
MEMORY
SAMPLE
AND
HOLD
ADDITION
STAGES
O/P
BUFFERS
ANALOG SUPPLY
3 MHz SHIFTING CLK
SANDCASTLE
DETECTOR
FREQUENCY
PHASE
DETECTOR
DIVIDER
BY 192
6 MHz
CCO
DIVIDER
BY 2
DIGITAL SUPPLY
TV04
BC337/40
TV05
BC548B
TV02
BC548B
DV07
1N4148
DV05
9V1
DV06
1N4148
DV01
1N4148
DV03
1N4148
DV02
1N4148
DF01
1N4001
DF22
1N4148
DF21
1N4148
TF21
BC548B
TF31
BC548C
BF01A
BF01B
V DY
RV02
39R
RV16
220R0
RV17
220R0
RV15
1K
RV535
47K
RV533
200K
RV520
47P
RV521
2K7
RV523
15K
RV25
100K
RV552
100R
RV555
390R
RV528
10K
RV529
12K
RV501
10K
RV503
63K
RV553
100R
RV536
100R
RV550
220R
RV549
470R
RV548
220R
RV547
220R
RV546
3K3
RV45
10K
RV514
75R
RV541
100R
RV543
1K
RV551
2K2
RV41
22R
TV01
KTC2655
CV529
56P
CV517
56P
CV518
56P
CV519
56P
CV522
22N
CV521
22N
CV523
22N
CV507
22N
CV506
22N
CV505
22N
CV515
22N
CV516
1N
CV14
470U
CV01
100N
CC02
33N
CC03
100N
CC04
100N
CV12
100N
CV11
100N
CV10
100N
CV528
220P
CV525
47P
CV524
47P
CV527
4N7
CV26
2U2
CC523
47P
CV02
100uF
CV503
150P
CV04
22n
CV07
22U
100V
CV29
22U
RC47
4K7
RC07
270K
RC506
332K
1%
CC519
4N7
RC520
18K
CC20
100N
RC04
10R
RC05
10R
RC01
560R
RC02
1K
RC08
470R
CC505
3P3
CC516
10N
CC511
10N
CC510
10N
CC515
10N
CC514
10N
CC513
10N
CC17
22U0
CC21
22U
100N
CC18
100N
CC12
LC02
10uH
LC01
10uH
RV523
15K
CV527
4N7
CV26
2U2
CC523
47P
CV524
47P
RV528
10K
RV529
12K
RV501
10K
RC02
1K
DV03
1N4148
RC08
470R
DV02
1N4148
CV29
22U
RV523
15K
RV25
100K
RV552
100R
RV555
390R
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1N4148
CV02
100uF
CV503
150P
CV04
22n
TV04
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CV07
22U
100V
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RV17
220R0
RV15
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RV535
47K
CV528
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503K
RV553
100R
RV536
100R
RV550
220R
RV549
470R
RV548
220R
RV547
220R
CV529
56P
CV517
56P
CV518
56P
CV519
56P
CV522
22N
CV521
22N
CV523
22N
CV507
22N
CV506
22N
CV505
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CV515
22N
CV516
1N
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CC02
33N
CC03
100N
CC04
100N
CV12
100N
CV11
100N
CV10
100N
CV528
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CV525
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CV26
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47P
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100uF
CV503
150P
CV04
22n
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22U
100V
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2K7
RV523
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RV25
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RV552
100R
RV555
390R
RV528
10K
RV529
12K
RV501
10K
RC02
1K
DV03
1N4148
RC08
470R
DV02
1N4148
CV29
22U
DV06
1N4148
DV01
1N4148
RC47
4K7
RC07
270K
RC506
332K
1%
CC519
4N7
RC520
18K
CC20
100N
RC04
10R
RC05
10R
RC01
560R
RC02
1K
RC08
470R
CC505
3P3
CC516
10N
CC511
10N
CC510
10N
CC515
10N
CC514
10N
CC513
10N
CC17
22U0
CC21
22U
100N
CC18
100N
CC12
LC02
10uH
LC01
10uH
RV523
15K
CV527
4N7
CV26
2U2
CC523
47P
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RV528
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RV529
12K
RV501
10K
RC02
1K
DV03
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RC08
470R
DV02
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CV29
22U
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DV01
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CV02
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TV04
BC337/40
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100V
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RV17
220R0
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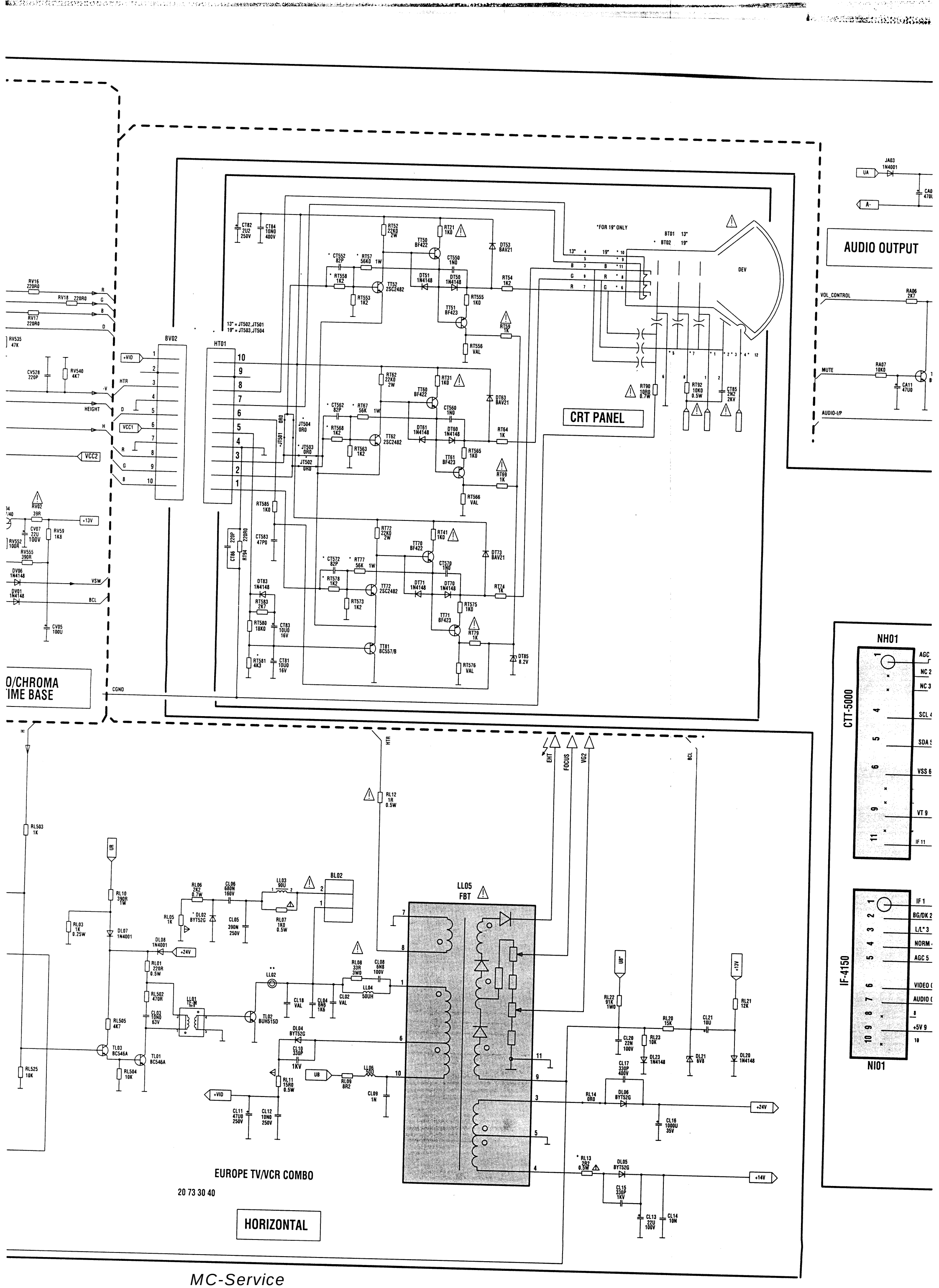
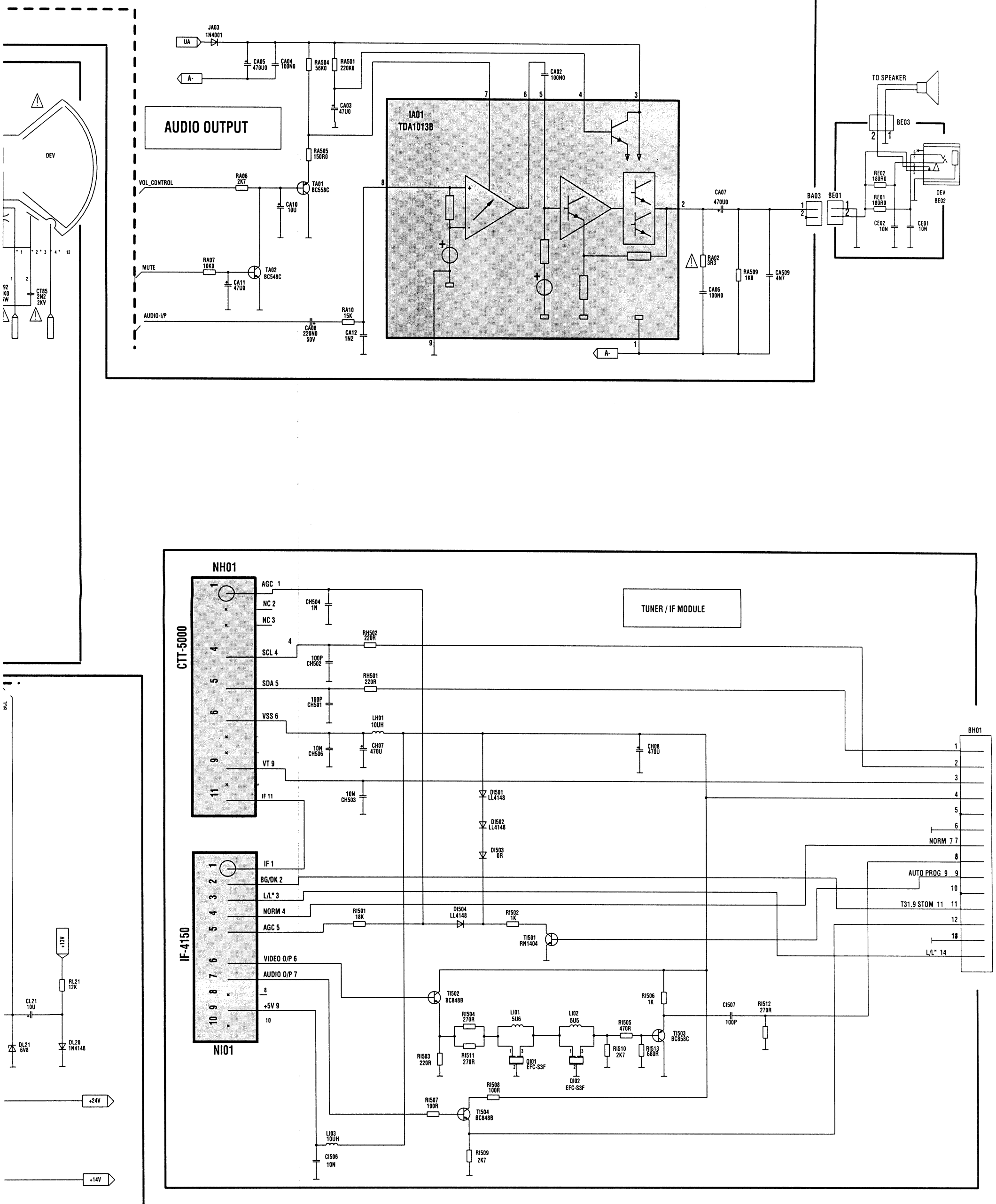
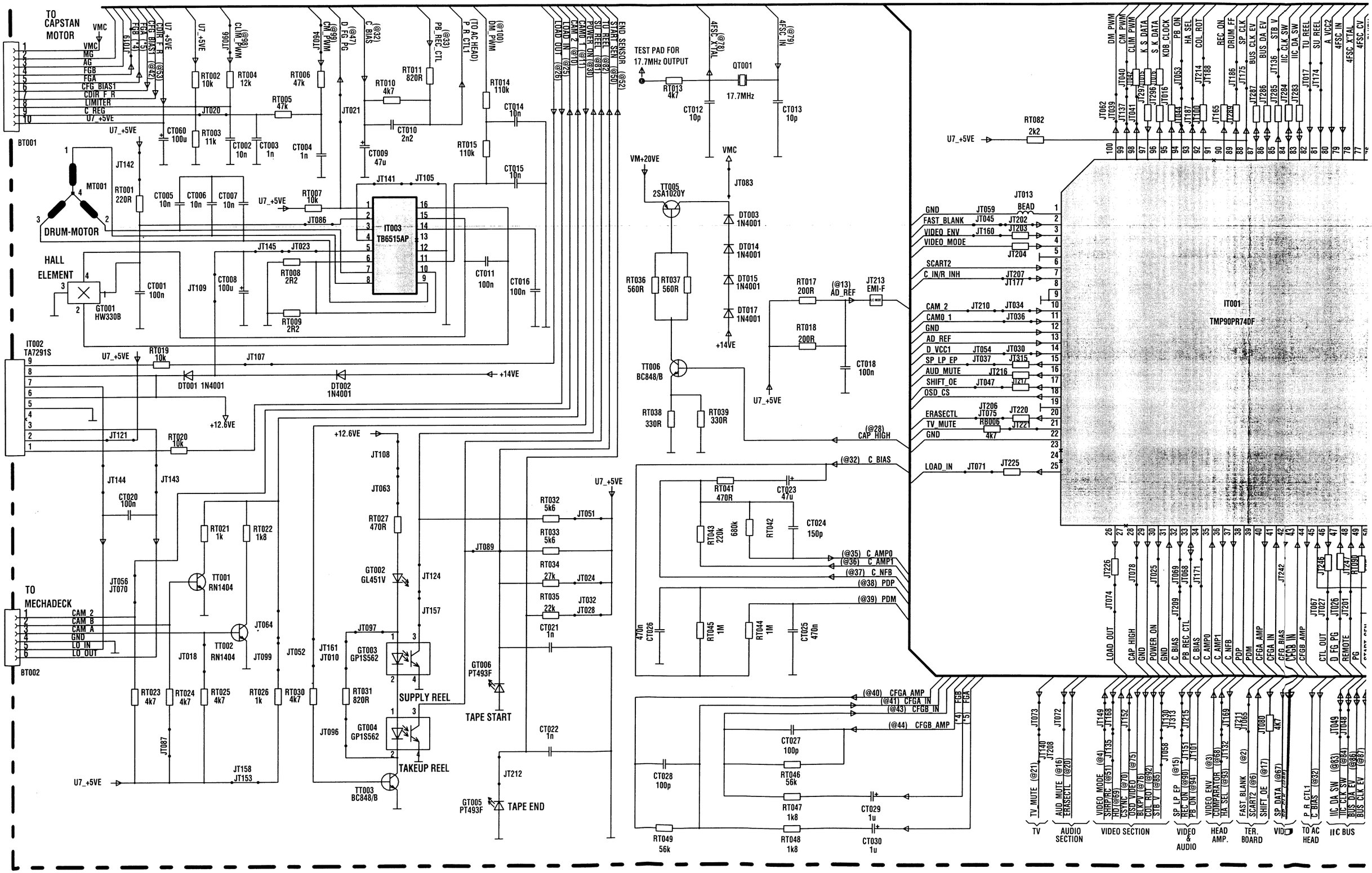
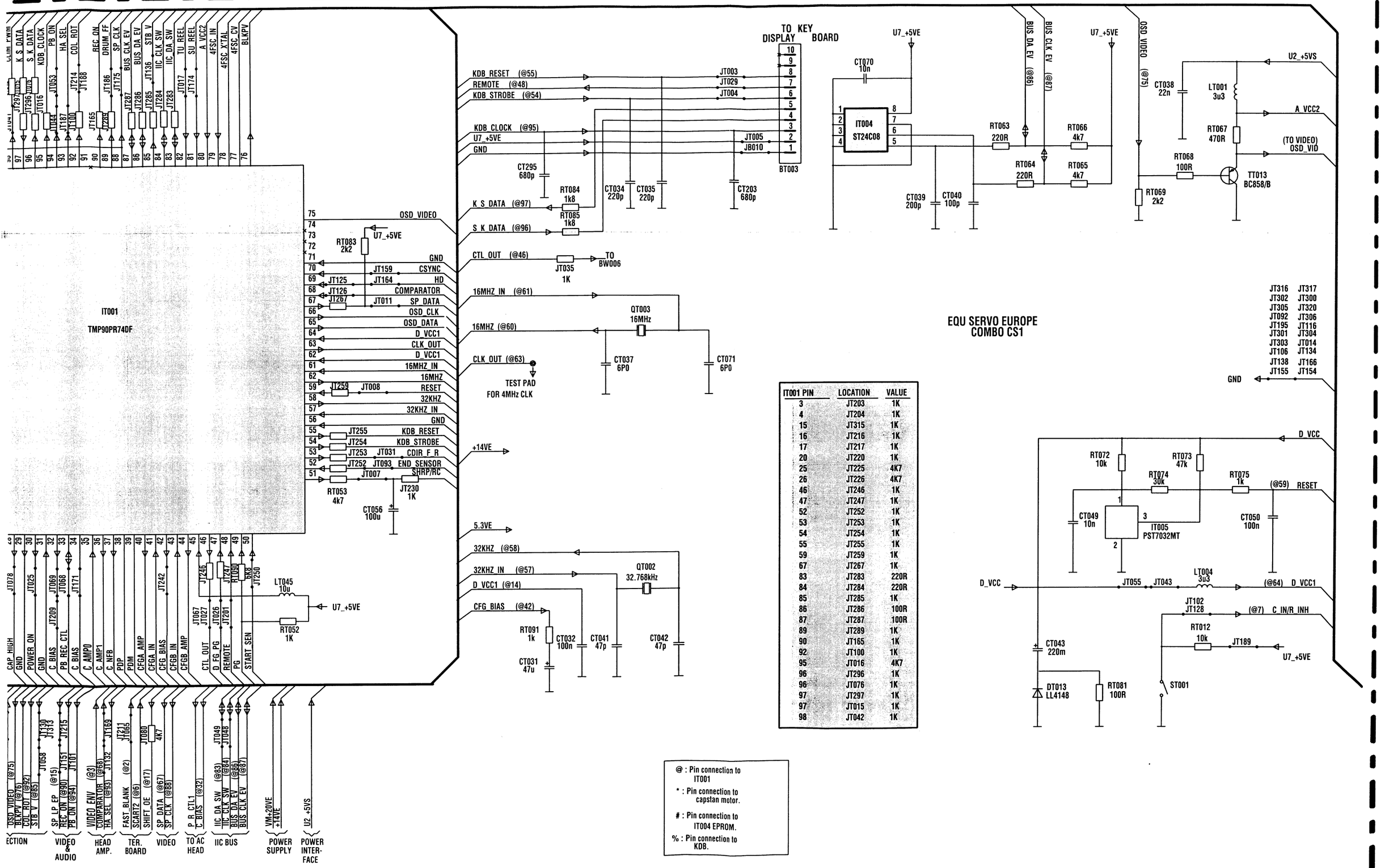
1K
RV535
47K
CV528
220P


AUDIO OUTPUT
CRT PANEL
*FOR 19" ONLY
13" = JT502,JT501
19" = JT503,JT504
DEV
VOL_CONTROL
MUTE
AUDIO-I/P
+VID
HTR
VCC1
VCC2
HEIGHT
-V
VSW
BCL
+13V
+24V
+14V
CGND
UB
EHT
FOCUS
VG2
BCL
HTR
UR
-JT501
JT504
JT503
JT502
LL05
FBT
BL02
NH01
CTT-5000
NI01
IF-4150
AGC
SCL
SDA
VSS
VT
IF
VIDEO
AUDIO
+5V
TT50 BF422
TT51 BF423
TT52 2SC2482
TT60 BF422
TT61 BF423
TT62 2SC2482
TT70 BF422
TT71 BF423
TT72 2SC2482
TT81 BC557/B
TL01 BC546A
TL02 BUH515D
TL03 BC546A
DT51 1N4148
DT50 1N4148
DT61 1N4148
DT60 1N4148
DT71 1N4148
DT70 1N4148
DT53 BAV21
DT63 BAV21
DT73 BAV21
DT85 8.2V
DL01 1N4148
DL03 1N4148
DL04 BYT52G
DL05 BYT52G
DL06 BYT52G
DL07 1N4001
DL08 1N4001
DL20 1N4148
DL21 6V8
DL23 1N4148
DV01 1N4148
DV06 1N4148
JA03 1N4001
BT01 13"
BT02 19"
EUROPE TV/VCR COMBO
20 73 30 40
HORIZONTAL
O/CHROMA
IME BASE


AUDIO OUTPUT
JA03
1N4001
UA
A-
CA05
470U0
CA04
100N0
RA504
56K0
RA501
220K0
CA03
47U0
IA01
TDA1013B
CA02
100N0
RA505
150R0
VOL_CONTROL
RA06
2K7
TA01
BC558C
CA10
10U
MUTE
RA07
10K0
TA02
BC548C
CA11
47U0
AUDIO-I/P
CA08
220N0
50V
RA10
15K
CA12
1N2
CA07
470U0
RA02
3R3
CA06
100N0
RA509
1K0
CA509
4N7
BA03
BE01
TO SPEAKER
BE03
RE02
180R0
RE01
180R0
CE02
10N
CE01
10N
DEV
BE02
DEV
CT85
2N2
2KV
TUNER / IF MODULE
NH01
CTT-5000
AGC 1
NC 2
NC 3
SCL 4
SDA 5
VSS 6
VT 9
IF 11
CH504
1N
RH502
220R
100P
CH502
RH501
220R
100P
CH501
LH01
10UH
10N
CH506
CH07
470U
CH08
470U
10N
CH503
DI501
LL4148
DI502
LL4148
DI503
0R
BH01
NORM 7 7
AUTO PROG 9 9
T31.9 STOM 11 11
L/L" 14
IF-4150
NI01
IF 1
BG/DK 2
L/L" 3
NORM 4
AGC 5
VIDEO O/P 6
AUDIO O/P 7
+5V 9
RI501
18K
DI504
LL4148
RI502
1K
TI501
RN1404
TI502
BC848B
RI504
270R
RI511
270R
LI01
5U6
LI02
5U5
QI01
EFC-S3F
QI02
EFC-S3F
RI503
220R
RI505
470R
RI506
1K
RI510
2K7
RI513
680R
TI503
BC858C
CI507
100P
RI512
270R
RI508
100R
RI507
100R
TI504
BC848B
LI03
10UH
CI506
10N
RI509
2K7
+13V
RL21
12K
CL21
10U
DL21
6V8
DL20
1N4148
+24V
+14V


TO CAPSTAN MOTOR
VMC
MG
AG
FGB
FGA
CFG_BIAS1
CDIR_F_R
LIMITER
C_REG
U7_+5VE
BT001
MT001
DRUM-MOTOR
HALL ELEMENT
GT001 HW330B
IT003 TB6515AP
IT002 TA7291S
TEST PAD FOR 17.7MHz OUTPUT
QT001
17.7MHz
VM+20VE
TT005 2SA1020Y
+14VE
TT006 BC848/B
DT001 1N4001
DT002 1N4001
DT003 1N4001
DT014 1N4001
DT015 1N4001
DT017 1N4001
+12.6VE
TO MECHADECK
CAM_2
CAM_B
CAM_A
GND
LO_IN
LO_OUT
BT002
TT001 RN1404
TT002 RN1404
TT003 BC848/B
GT002 GL451V
GT003 GP1S562
GT004 GP1S562
SUPPLY REEL
TAKEUP REEL
GT006 PT493F
TAPE START
GT005 PT493F
TAPE END
IT001
TMP90PR74DF
TV
AUDIO SECTION
VIDEO SECTION
VIDEO & AUDIO
HEAD AMP.
TER. BOARD
TO AC HEAD
IIC BUS



IT001 PIN	LOCATION	VALUE
3	JT203	1K
4	JT204	1K
15	JT315	1K
16	JT216	1K
17	JT217	1K
20	JT220	1K
25	JT225	4K7
26	JT226	4K7
46	JT246	1K
47	JT247	1K
52	JT252	1K
53	JT253	1K
54	JT254	1K
55	JT255	1K
59	JT259	1K
67	JT267	1K
83	JT283	220R
84	JT284	220R
85	JT285	1K
86	JT286	100R
87	JT287	100R
89	JT289	1K
90	JT165	1K
92	JT100	1K
95	JT016	4K7
96	JT296	1K
96	JT076	1K
97	JT297	1K
97	JT015	1K
98	JT042	1K

JT316	JT317
JT302	JT300
JT305	JT320
JT092	JT306
JT195	JT116
JT301	JT304
JT303	JT014
JT106	JT134
JT138	JT166
JT155	JT154

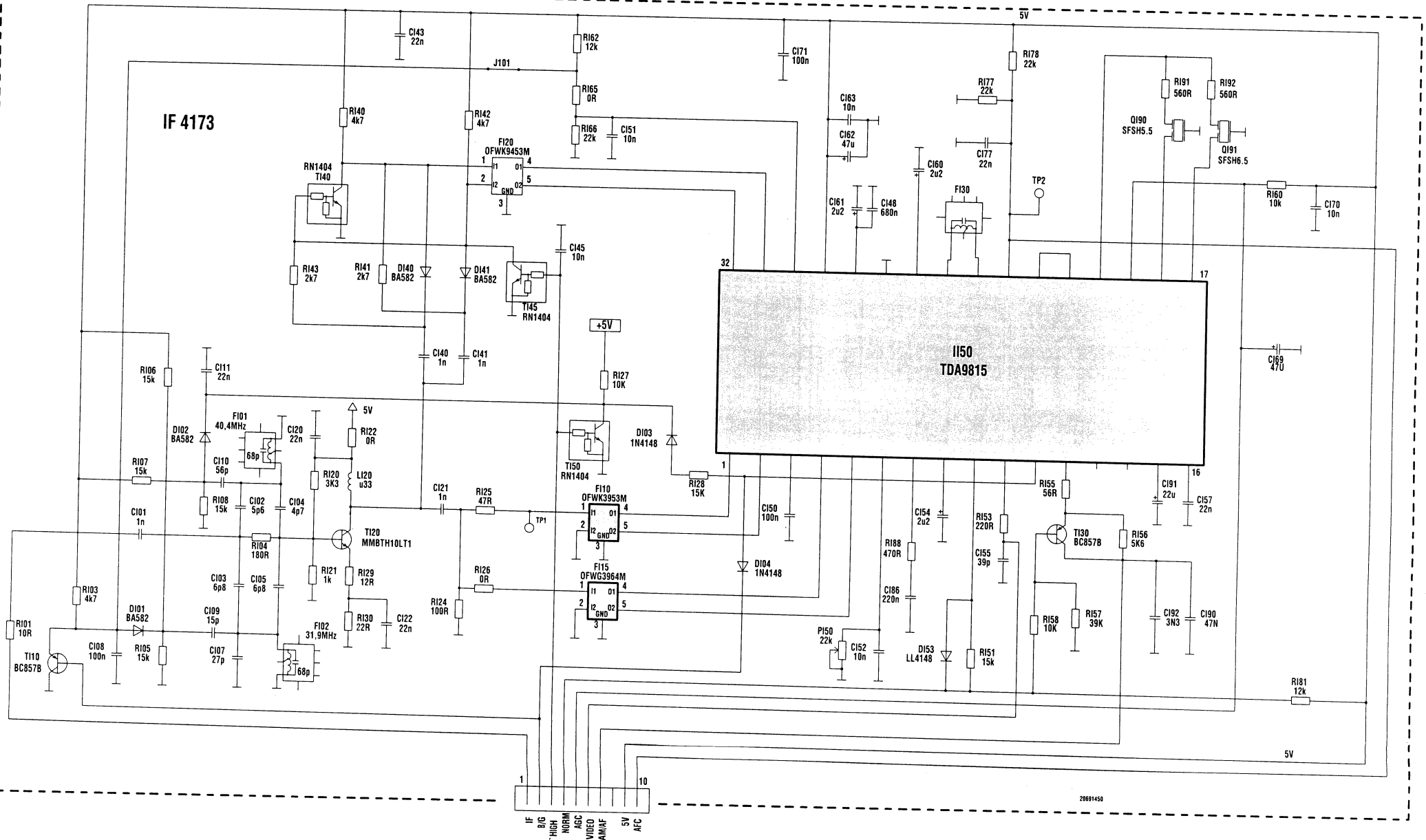
@ : Pin connection to IT001

* : Pin connection to capstan motor.

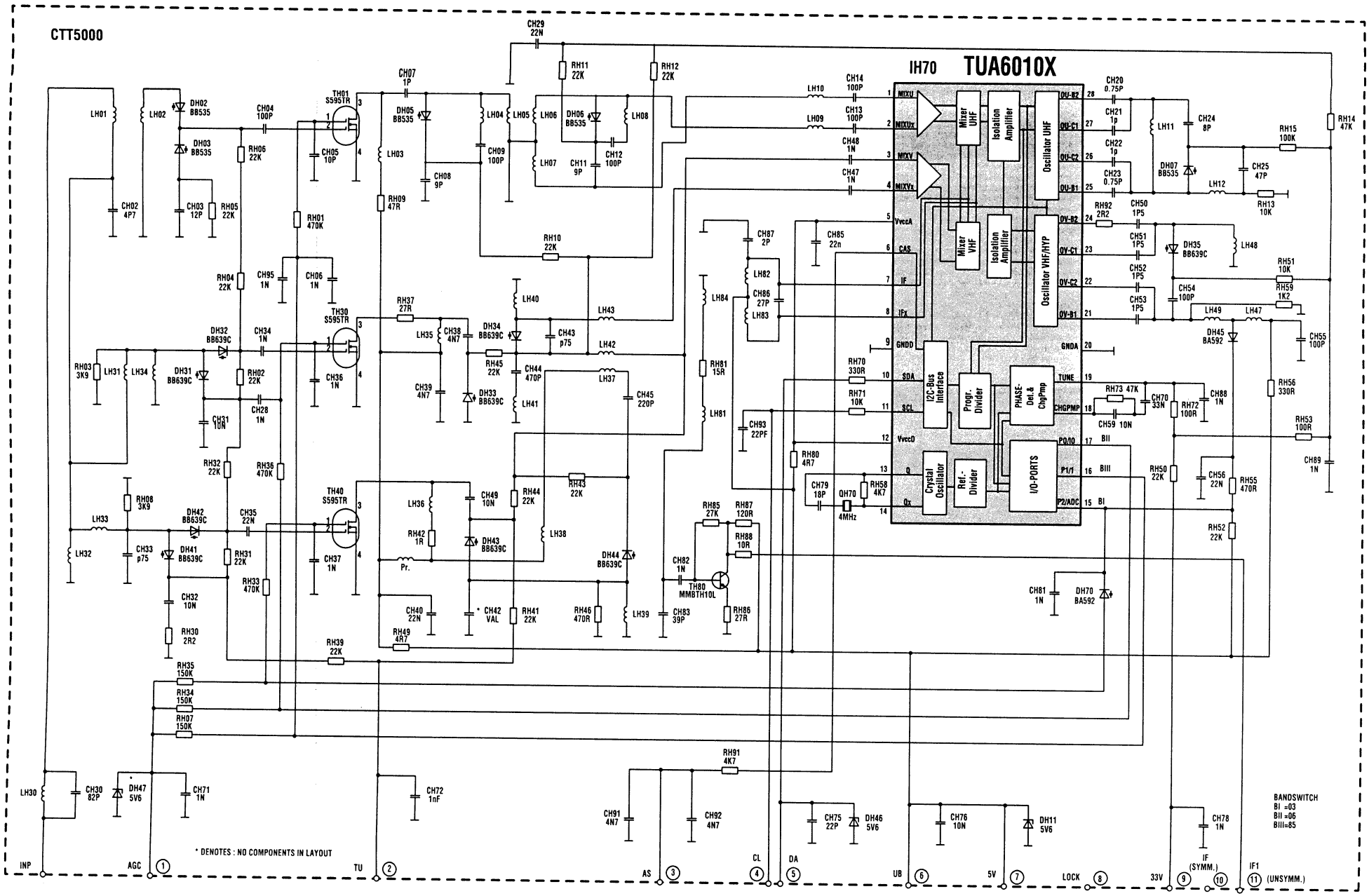
: Pin connection to IT004 EPROM.

% : Pin connection to KDB.

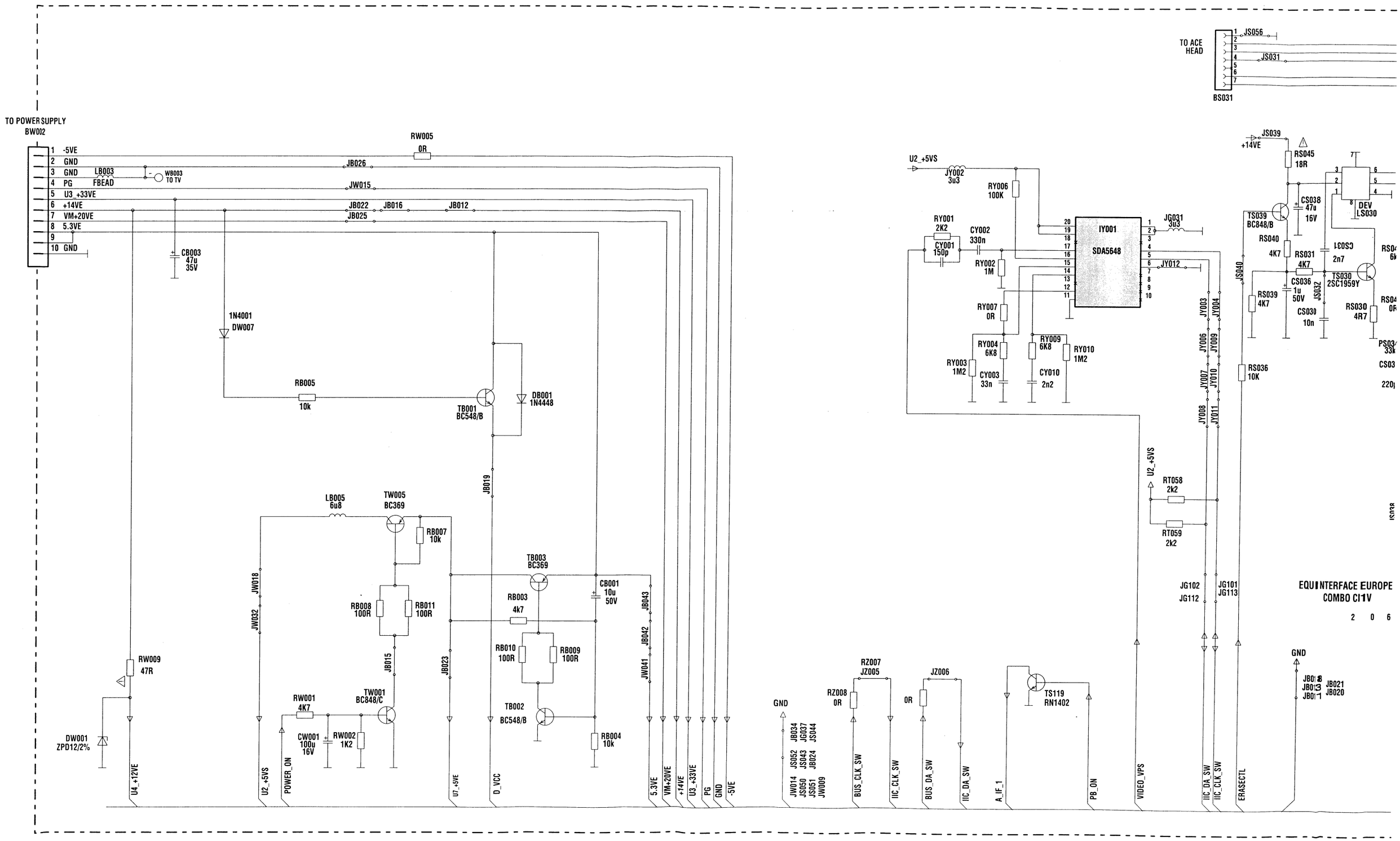
IF4173 (For information only)

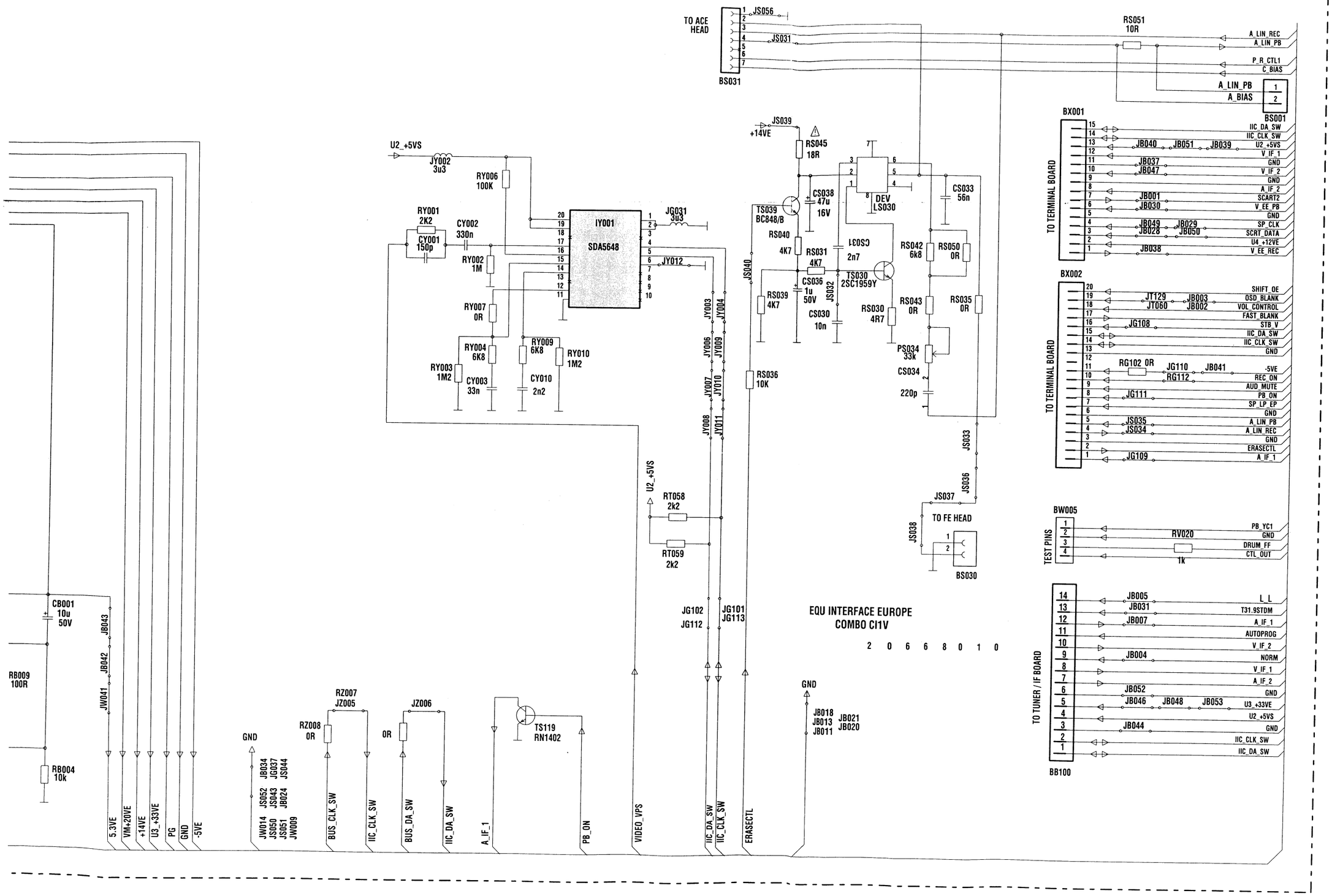


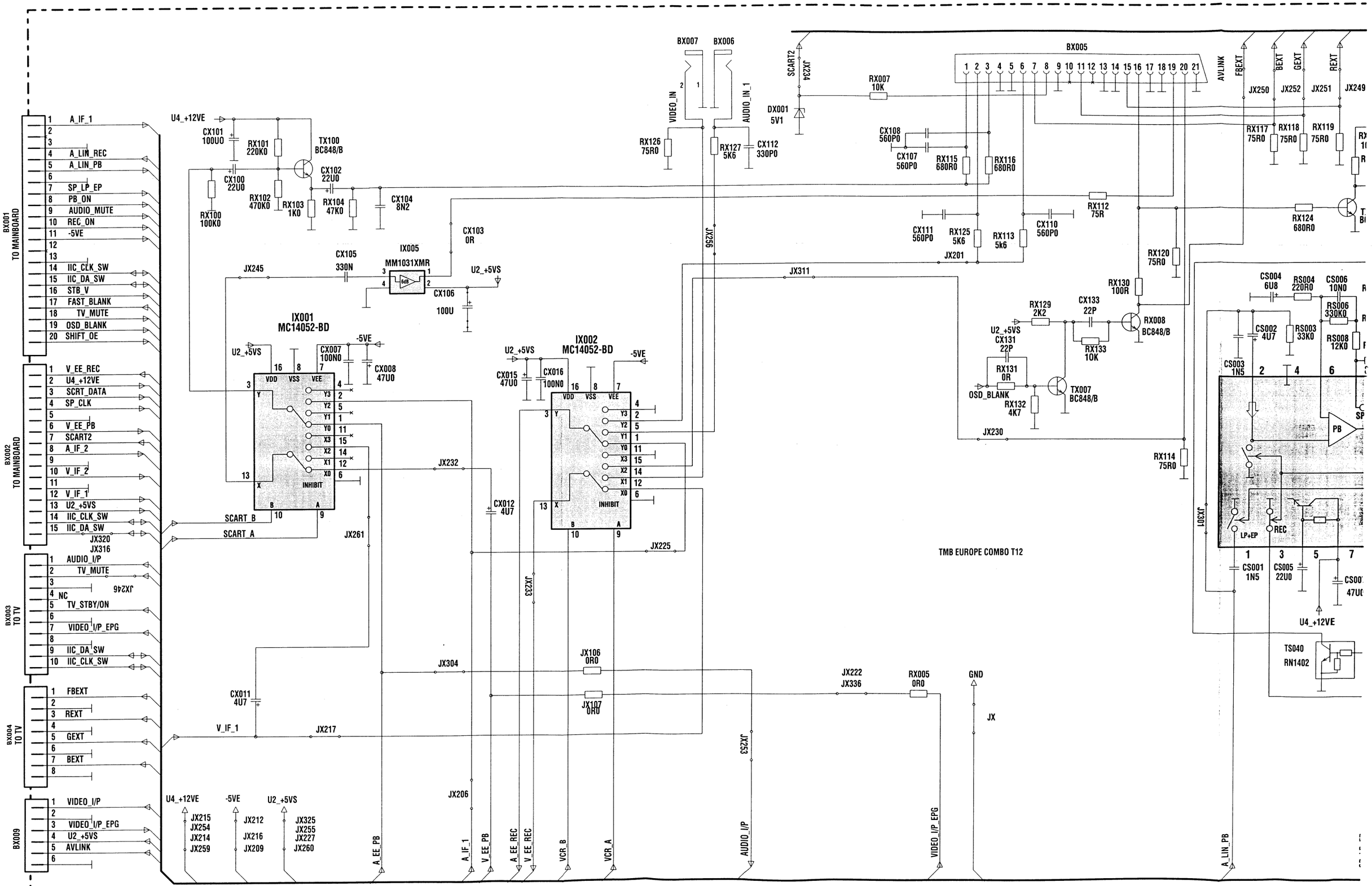
TUNER (For information only)

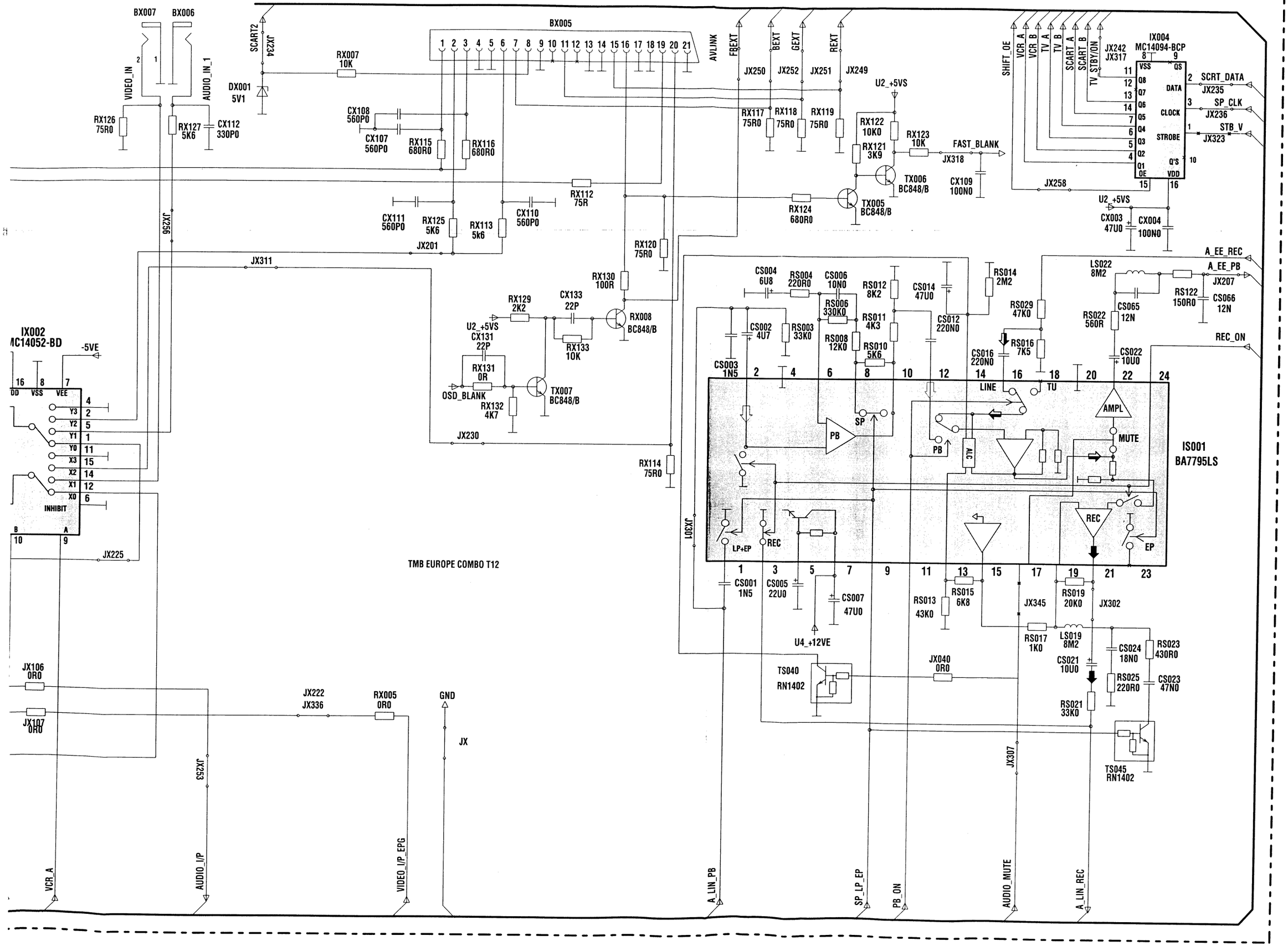


POWER SUPPLY INTERFACE / TUNER / IF SECTION - INTERFACE ALIMENTATION / TUNERT FI - NETZTEIL INTERFACE / TUNER /ZF - INTERFACCIA ALIMENTAZIONE / TUNER / IF - INTERFAZ ALIMENTACIÓN / TUNER / IF



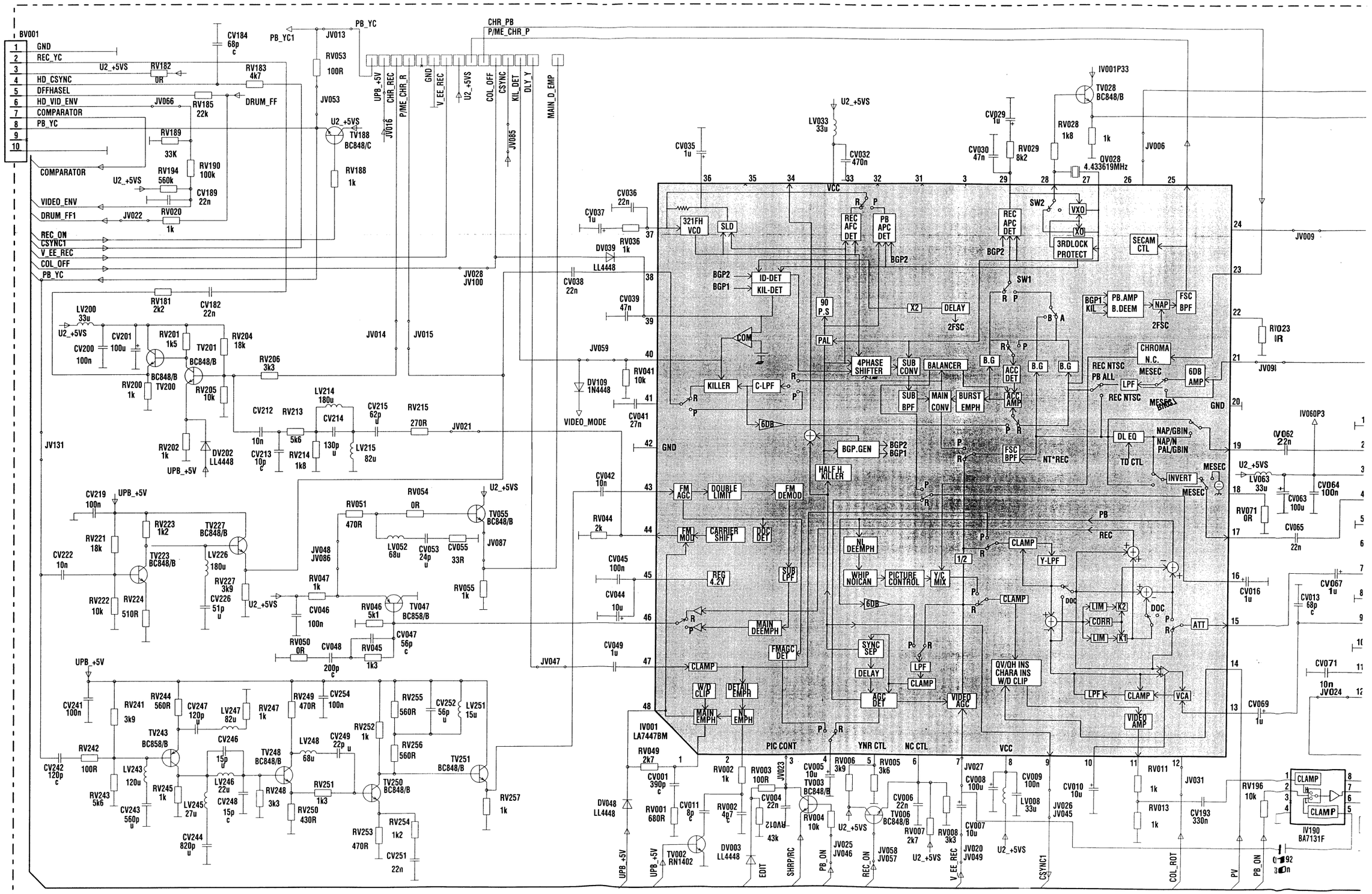

TO ACE HEAD
BS031
JS056
JS031
RS051 10R
A_LIN_REC
A_LIN_PB
P_R_CTL1
C_BIAS
A_LIN_PB
A_BIAS
BS001
BX001
TO TERMINAL BOARD
IIC_DA_SW
IIC_CLK_SW
U2_+5VS
V_IF_1
GND
V_IF_2
GND
A_IF_2
SCART2
V_EE_PB
GND
SP_CLK
SCRT_DATA
U4_+12VE
V_EE_REC
BX002
SHIFT_OE
OSD_BLANK
VOL_CONTROL
FAST_BLANK
STB_V
IIC_DA_SW
IIC_CLK_SW
GND
RG102 0R
-5VE
REC_ON
AUD_MUTE
PB_ON
SP_LP_EP
GND
A_LIN_PB
A_LIN_REC
GND
ERASECTL
A_IF_1
BW005
TEST PINS
PB_YC1
GND
DRUM_FF
CTL_OUT
RV020
1k
BB100
TO TUNER / IF BOARD
L_L
T31.9STDM
A_IF_1
AUTOPROG
V_IF_2
NORM
V_IF_1
A_IF_2
GND
U3_+33VE
U2_+5VS
GND
IIC_CLK_SW
IIC_DA_SW
JS039
+14VE
RS045 18R
CS038 47u 16V
TS039 BC848/B
RS040 4K7
RS031 4K7
CS031 2n7
TS030 2SC1959Y
CS036 1u 50V
CS030 10n
RS039 4K7
RS036 10K
JS040
JS032
DEV LS030
CS033 56n
RS042 6k8
RS050 0R
RS043 0R
RS035 0R
RS030 4R7
PS034 33k
CS034 220p
JS033
JS036
JS037
JS038
TO FE HEAD
BS030
U2_+5VS
JY002 3u3
RY006 100K
RY001 2K2
CY001 150p
CY002 330n
RY002 1M
RY007 0R
RY004 6K8
RY003 1M2
CY003 33n
RY009 6K8
RY010 1M2
CY010 2n2
IY001 SDA5648
JG031 303
JY012
JY003
JY004
JY006
JY009
JY007
JY010
JY008
JY011
RT058 2k2
RT059 2k2
JG102
JG112
JG101
JG113
EQU INTERFACE EUROPE
COMBO CI1V
2 0 6 6 8 0 1 0
CB001 10u 50V
RB009 100R
RB004 10k
JB043
JB042
JW041
5.3VE
VM+20VE
+14VE
U3_+33VE
PG
GND
-5VE
GND
JB034
JG037
JS044
JW014
JS052
JS043
JS050
JB024
JS051
JW009
RZ007 JZ005
RZ008 0R
BUS_CLK_SW
IIC_CLK_SW
JZ006
0R
BUS_DA_SW
IIC_DA_SW
TS119 RN1402
A_IF_1
PB_ON
VIDEO_VPS
IIC_DA_SW
IIC_CLK_SW
ERASECTL
GND
JB018
JB013
JB011
JB021
JB020

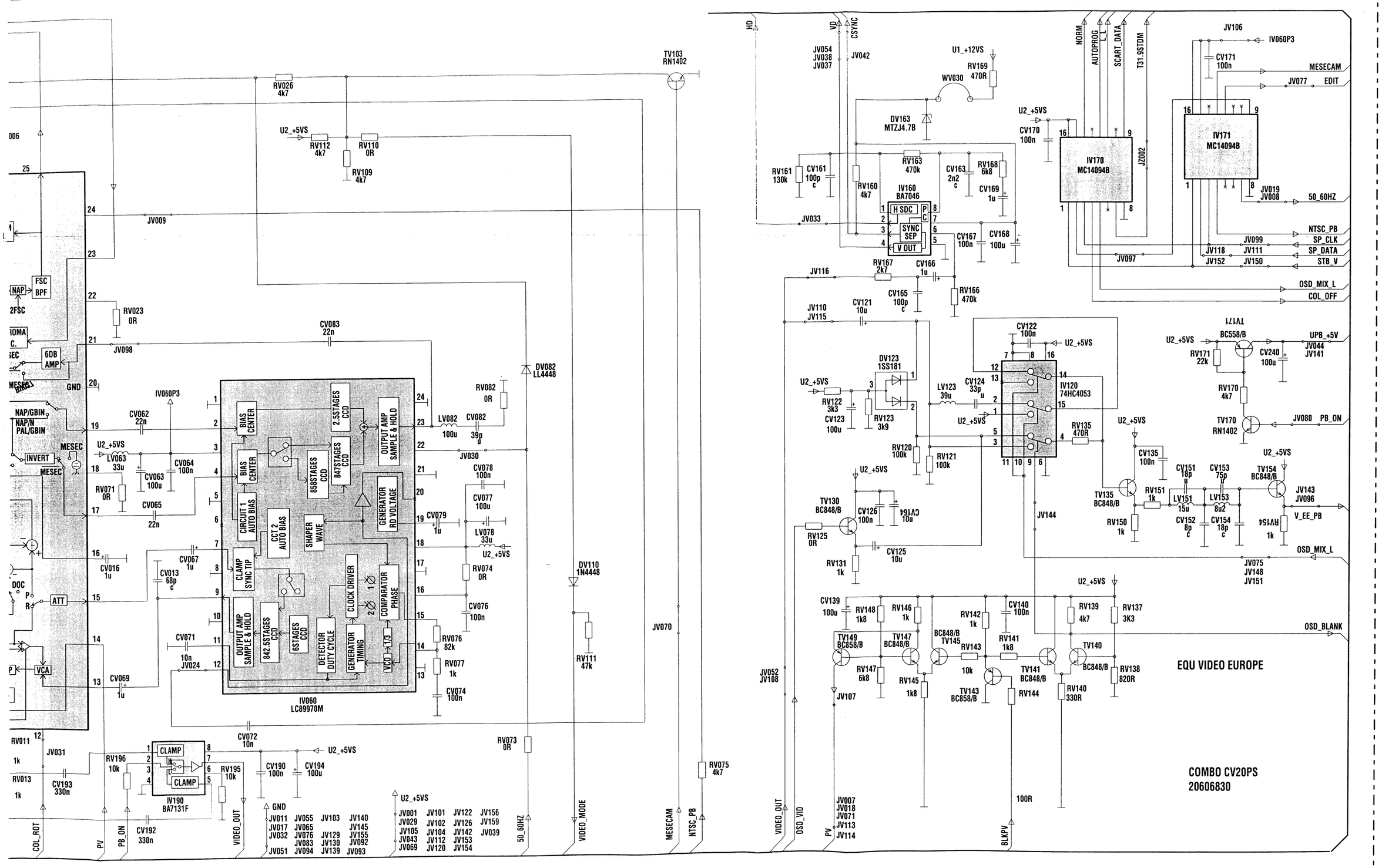

BX001 TO MAINBOARD
1 A_IF_1
4 A_LIN_REC
5 A_LIN_PB
7 SP_LP_EP
8 PB_ON
9 AUDIO_MUTE
10 REC_ON
11 -5VE
14 IIC_CLK_SW
15 IIC_DA_SW
16 STB_V
17 FAST_BLANK
18 TV_MUTE
19 OSD_BLANK
20 SHIFT_OE
BX002 TO MAINBOARD
1 V_EE_REC
2 U4_+12VE
3 SCRT_DATA
4 SP_CLK
6 V_EE_PB
7 SCART2
8 A_IF_2
10 V_IF_2
12 V_IF_1
13 U2_+5VS
14 IIC_CLK_SW
15 IIC_DA_SW
JX320
JX316
BX003 TO TV
1 AUDIO_I/P
2 TV_MUTE
JX246
4 NC
5 TV_STBY/ON
7 VIDEO_I/P_EPG
9 IIC_DA_SW
10 IIC_CLK_SW
BX004 TO TV
1 FBEXT
3 REXT
5 GEXT
7 BEXT
BX009
1 VIDEO_I/P
3 VIDEO_I/P_EPG
4 U2_+5VS
5 AVLINK
U4_+12VE
CX101 100U0
RX101 220K0
TX100 BC848/B
CX102 22U0
CX100 22U0
RX100 100K0
RX102 470K0
RX103 1K0
RX104 47K0
CX104 8N2
CX103 0R
IX005 MM1031XMR
CX105 330N
CX106 100U
JX245
U2_+5VS
IX001 MC14052-BD
-5VE
CX007 100N0
CX008 47U0
SCART_B
SCART_A
JX320
JX316
JX232
JX261
CX011 4U7
V_IF_1
JX217
IX002 MC14052-BD
CX015 47U0
CX016 100N0
CX012 4U7
JX225
JX233
JX304
JX206
JX106 0R0
JX107 0R0
JX222
JX336
RX005 0R0
GND
JX
JX253
JX215
JX254
JX214
JX259
JX212
JX216
JX209
JX325
JX255
JX227
JX260
A_EE_PB
A_IF_1
V_EE_PB
A_EE_REC
V_EE_REC
VCR_B
VCR_A
AUDIO_I/P
VIDEO_I/P_EPG
A_LIN_PB
BX007
BX006
VIDEO_IN
AUDIO_IN_1
RX126 75R0
RX127 5K6
CX112 330P0
DX001 5V1
SCART2
JX234
RX007 10K
CX108 560P0
CX107 560P0
RX115 680R0
RX116 680R0
JX256
CX111 560P0
RX125 5K6
JX201
RX113 5k6
CX110 560P0
RX112 75R
RX120 75R0
RX130 100R
RX129 2K2
CX133 22P
RX008 BC848/B
U2_+5VS
CX131 22P
RX133 10K
RX131 0R
OSD_BLANK
TX007 BC848/B
RX132 4K7
JX230
RX114 75R0
BX005
AVLINK
FBEXT
BEXT
GEXT
REXT
JX250
JX252
JX251
JX249
RX117 75R0
RX118 75R0
RX119 75R0
RX124 680R0
CS004 6U8
RS004 220R0
CS006 10N0
RS006 330K0
CS002 4U7
RS003 33K0
RS008 12K0
CS003 1N5
PB
LP+EP
REC
JX301
CS001 1N5
CS005 22U0
U4_+12VE
TS040 RN1402
TMB EUROPE COMBO T12

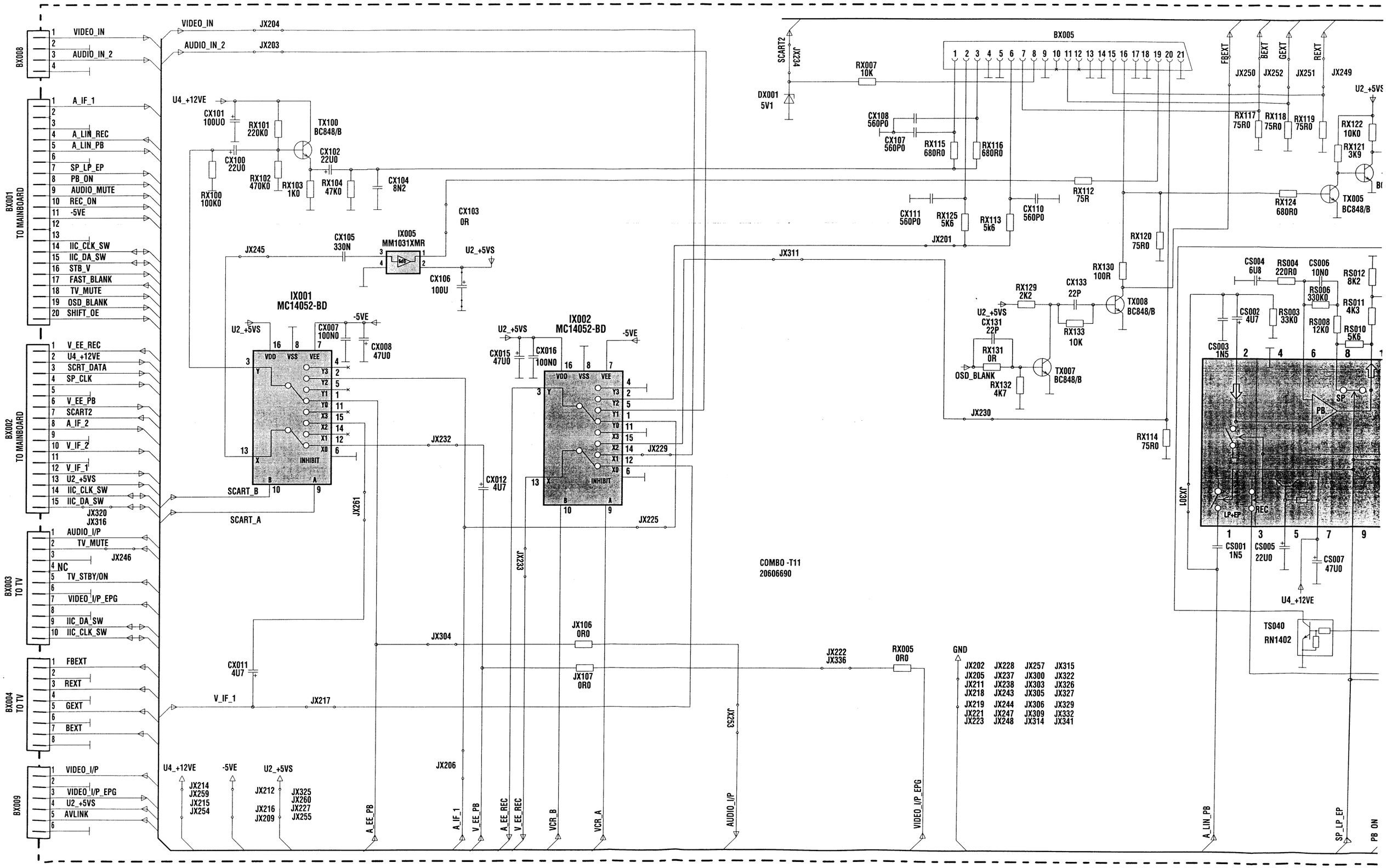


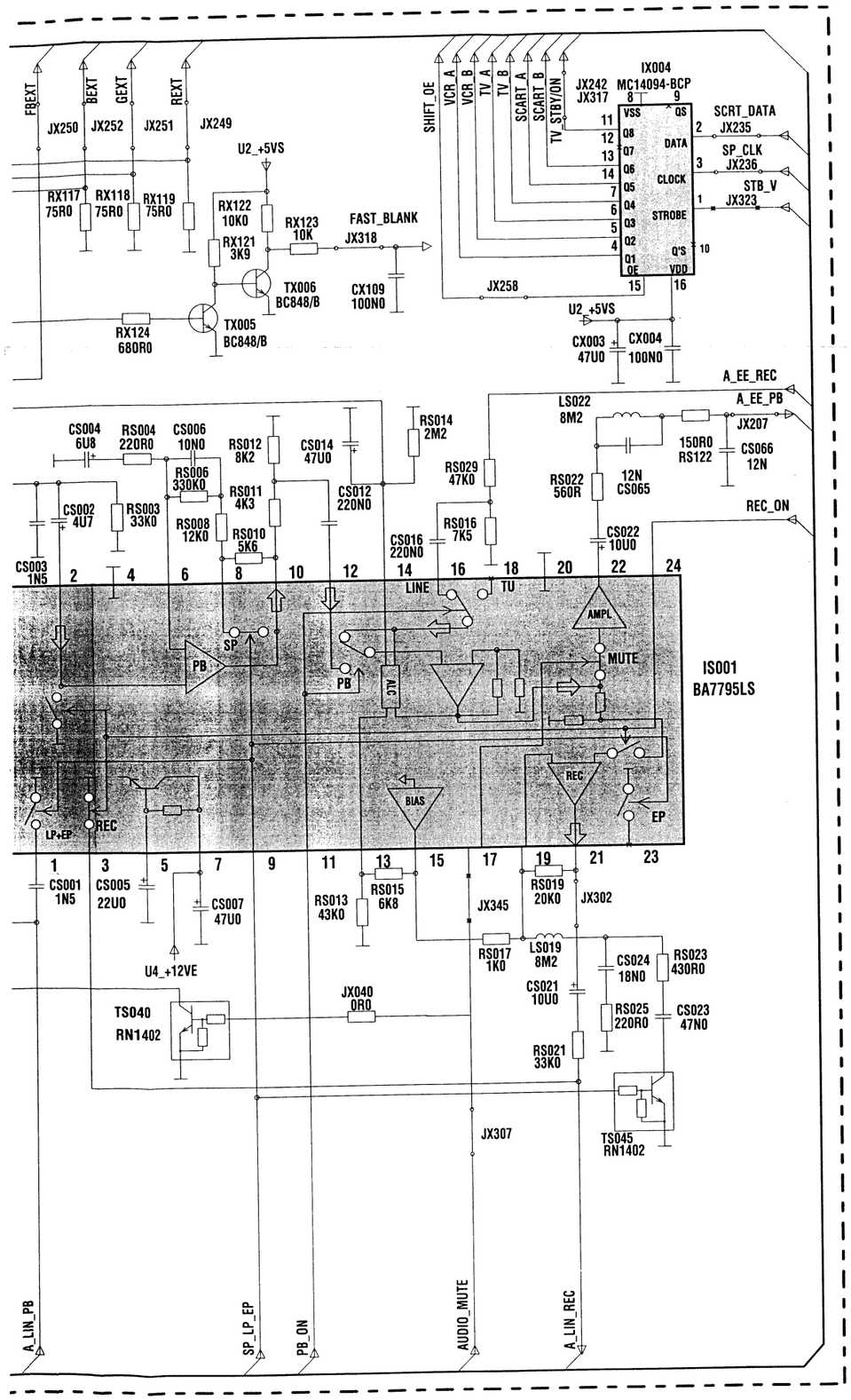
TMB EUROPE COMBO T12

VIDEO SIGNAL PROCESSING - TRAITEMENT LUMINANCE / CHROMINANCE - VIDEO SIGNALVERARBEITUNG - ELABORAZIONE VIDEO - TRATAMIENTO VIDEO




TV103
RN1402
RV026
4k7
U2_+5VS
RV112
4k7
RV110
0R
RV109
4k7
006
25
24
JV009
23
22
RV023
0R
21
JV098
CV083
22n
DV082
LL4448
20
GND
IVO60P3
CV062
22n
19
2
3
18
LV063
33u
CV063
100u
CV064
100n
4
RV071
0R
17
CV065
22n
5
6
7
16
CV016
1u
CV067
1u
8
CV013
68p
c
9
15
14
CV071
10n
JV024
10
11
12
13
CV069
1u
FSC
BPF
NAP
2FSC
6DB
AMP
MESEC
BARG
NAP/GBIN
NAP/N
PAL/GBIN
MESEC
INVERT
MESEC
DOC
P
R
ATT
VCA
IV060
LC89970M
BIAS CENTER
CIRCUIT 1 AUTO BIAS
CCT 2 AUTO BIAS
CLAMP SYNC TIP
OUTPUT AMP SAMPLE & HOLD
842.5STAGES CCD
6STAGES CCD
858STAGES CCD
847STAGES CCD
2.5STAGES CCD
OUTPUT AMP SAMPLE & HOLD
SHAPER WAVE
GENERATOR RD VOLTAGE
DETECTOR DUTY CYCLE
CLOCK DRIVER
GENERATOR TIMING
COMPARATOR PHASE
VCO
÷3
÷2
÷1
1
2
3
4
24
23
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
LV082
100u
CV082
39p
u
RV082
0R
JV030
CV078
100n
CV077
100u
CV079
1u
LV078
33u
U2_+5VS
RV074
0R
CV076
100n
RV076
82k
RV077
1k
CV074
100n
DV110
1N4448
RV111
47k
JV070
RV073
0R
RV075
4k7
CV072
10n
RV011
1k
JV031
RV013
1k
CV193
330n
RV196
10k
CLAMP
CLAMP
IV190
BA7131F
RV195
10k
CV190
100n
CV194
100u
CV192
330n
COL_ROT
PV
PB_ON
VIDEO_OUT
GND
JV011 JV055 JV103 JV140
JV017 JV065 JV145
JV032 JV076 JV129 JV155
JV083 JV130 JV092
JV051 JV094 JV139 JV093
U2_+5VS
JV001 JV101 JV122 JV156
JV029 JV102 JV126 JV159
JV105 JV104 JV142 JV039
JV043 JV112 JV153
JV069 JV120 JV154
50_60HZ
VIDEO_MODE
MESECAM
NTSC_PB
VIDEO_OUT
OSD_VID
HD
VD
CSYNC
JV054
JV038
JV037
JV042
U1_+12VS
RV169
470R
WV030
DV163
MTZJ4.7B
RV161
130k
CV161
100p
c
RV160
4k7
RV163
470k
IV160
BA7046
H SDC
SYNC SEP
V OUT
P C
CV163
2n2
c
RV168
6k8
CV169
1u
JV033
CV167
100n
CV168
100u
RV167
2k7
CV166
1u
JV116
CV165
100p
c
RV166
470k
CV121
10u
JV110
JV115
DV123
1SS181
U2_+5VS
RV122
3k3
CV123
100u
RV123
3k9
LV123
39u
CV122
100n
CV124
33p
u
IV120
74HC4053
RV120
100k
RV121
100k
RV135
470R
U2_+5VS
NORM
AUTOPROG
SCART_DATA
T31.9STDM
U2_+5VS
CV170
100n
IV170
MC14094B
JZ002
JV106
IVO60P3
CV171
100n
MESECAM
JV077
EDIT
IV171
MC14094B
JV019
JV008
50_60HZ
NTSC_PB
SP_CLK
SP_DATA
STB_V
JV099
JV118
JV111
JV152
JV150
JV097
OSD_MIX_L
COL_OFF
TV171
BC558/B
U2_+5VS
RV171
22k
CV240
100u
UPB_+5V
JV044
JV141
RV170
4k7
TV170
RN1402
JV080
PB_ON
U2_+5VS
TV154
BC848/B
CV135
100n
TV135
BC848/B
RV151
1k
CV151
18p
u
LV151
15u
CV153
75p
u
LV153
8u2
CV152
8p
c
CV154
18p
c
RV154
1k
JV143
JV096
V_EE_PB
RV150
1k
JV144
OSD_MIX_L
JV075
JV148
JV151
TV130
BC848/B
U2_+5VS
CV126
100n
CV164
10u
RV125
0R
RV131
1k
CV125
10u
U2_+5VS
CV139
100u
RV148
1k8
RV146
1k
TV149
BC858/B
TV147
BC848/B
BC848/B
TV145
RV147
6k8
RV145
1k8
RV142
1k
RV143
10k
CV140
100n
RV141
1k8
TV143
BC858/B
TV141
BC848/B
RV144
RV139
4k7
RV137
3K3
TV140
BC848/B
RV138
820R
RV140
330R
OSD_BLANK
JV107
JV052
JV108
JV007
JV018
JV071
JV113
JV114
PV
100R
BLKPV
EQU VIDEO EUROPE
COMBO CV20PS
20606830


BX008
1 VIDEO_IN
2
3 AUDIO_IN_2
4
BX001 TO MAINBOARD
1 A_IF_1
2
3
4 A_LIN_REC
5 A_LIN_PB
6
7 SP_LP_EP
8 PB_ON
9 AUDIO_MUTE
10 REC_ON
11 -5VE
12
13
14 IIC_CLK_SW
15 IIC_DA_SW
16 STB_V
17 FAST_BLANK
18 TV_MUTE
19 OSD_BLANK
20 SHIFT_OE
BX002 TO MAINBOARD
1 V_EE_REC
2 U4_+12VE
3 SCRT_DATA
4 SP_CLK
5
6 V_EE_PB
7 SCART2
8 A_IF_2
9
10 V_IF_2
11
12 V_IF_1
13 U2_+5VS
14 IIC_CLK_SW
15 IIC_DA_SW
JX320
JX316
BX003 TO TV
1 AUDIO_I/P
2 TV_MUTE
3
JX246
4 NC
5 TV_STBY/ON
6
7 VIDEO_I/P_EPG
8
9 IIC_DA_SW
10 IIC_CLK_SW
BX004 TO TV
1 FBEXT
2
3 REXT
4
5 GEXT
6
7 BEXT
8
BX009
1 VIDEO_I/P
2
3 VIDEO_I/P_EPG
4 U2_+5VS
5 AVLINK
6
VIDEO_IN
JX204
AUDIO_IN_2
JX203
U4_+12VE
CX101 100U0
RX101 220K0
TX100 BC848/B
CX100 22U0
RX100 100K0
RX102 470K0
RX103 1K0
CX102 22U0
RX104 47K0
CX104 8N2
CX103 0R
JX245
CX105 330N
IX005 MM1031XMR
U2_+5VS
CX106 100U
IX001 MC14052-BD
-5VE
CX007 100N0
CX008 47U0
SCART_B
SCART_A
JX232
JX261
CX012 4U7
IX002 MC14052-BD
CX015 47U0
CX016 100N0
JX229
JX225
JX233
JX311
SCART2
JX234
DX001 5V1
RX007 10K
BX005
CX108 560P0
CX107 560P0
RX115 680R0
RX116 680R0
RX112 75R
CX111 560P0
RX125 5K6
RX113 5k6
CX110 560P0
JX201
RX120 75R0
RX130 100R
RX129 2K2
CX133 22P
TX008 BC848/B
U2_+5VS
CX131 22P
RX133 10K
RX131 0R
OSD_BLANK
RX132 4K7
TX007 BC848/B
JX230
RX114 75R0
FBEXT
BEXT
GEXT
REXT
JX250
JX252
JX251
JX249
RX117 75R0
RX118 75R0
RX119 75R0
RX122 10K0
RX121 3K9
RX124 680R0
TX005 BC848/B
CS004 6U8
RS004 220R0
CS006 10N0
RS012 8K2
RS006 330K0
RS011 4K3
CS002 4U7
RS003 33K0
RS008 12K0
RS010 5K6
CS003 1N5
SP
PB
LP+EP
REC
JX301
CS001 1N5
CS005 22U0
CS007 47U0
U4_+12VE
TS040 RN1402
COMBO -T11
20606690
JX106 0R0
JX107 0R0
JX304
JX222 JX336
RX005 0R0
CX011 4U7
V_IF_1
JX217
JX253
JX206
GND
JX202 JX228 JX257 JX315
JX205 JX237 JX300 JX322
JX211 JX238 JX303 JX326
JX218 JX243 JX305 JX327
JX219 JX244 JX306 JX329
JX221 JX247 JX309 JX332
JX223 JX248 JX314 JX341
U4_+12VE
-5VE
U2_+5VS
JX214 JX259 JX215 JX254
JX212
JX216 JX209
JX325 JX260 JX227 JX255
A_EE_PB
A_IF_1
V_EE_PB
A_EE_REC
V_EE_REC
VCR_B
VCR_A
AUDIO_I/P
VIDEO_I/P_EPG
A_LIN_PB
SP_LP_EP
PB ON


FBEXT
BEXT
GEXT
REXT
JX250
JX252
JX251
JX249
U2_+5VS
RX117 75R0
RX118 75R0
RX119 75R0
RX122 10K0
RX121 3K9
RX123 10K
FAST_BLANK
JX318
TX006 BC848/B
TX005 BC848/B
RX124 680R0
CX109 100N0
SHIFT_OE
VCR_A
VCR_B
TV_A
TV_B
SCART_A
SCART_B
TV_STBY/ON
IX004
JX242
JX317
MC14094-BCP
VSS
Q8
Q7
Q6
Q5
Q4
Q3
Q2
Q1
OE
QS
DATA
CLOCK
STROBE
Q'S
VDD
SCRT_DATA
JX235
SP_CLK
JX236
STB_V
JX323
JX258
U2_+5VS
CX003 47U0
CX004 100N0
A_EE_REC
A_EE_PB
JX207
LS022 8M2
150R0 RS122
CS066 12N
REC_ON
CS004 6U8
RS004 220R0
CS006 10N0
RS012 8K2
CS014 47U0
RS014 2M2
RS006 330K0
RS011 4K3
CS012 220N0
RS029 47K0
CS002 4U7
RS003 33K0
RS008 12K0
RS010 5K6
RS022 560R
12N CS065
CS016 220N0
RS016 7K5
CS022 10U0
CS003 1N5
LINE
TU
AMPL
MUTE
PB
SP
ALC
BIAS
REC
EP
LP+EP
IS001
BA7795LS
CS001 1N5
CS005 22U0
CS007 47U0
RS013 43K0
RS015 6K8
JX345
RS019 20K0
JX302
U4_+12VE
RS017 1K0
LS019 8M2
CS024 18N0
RS023 430R0
CS021 10U0
RS025 220R0
CS023 47N0
JX040 0R0
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RS021 33K0
JX307
TS045 RN1402
A_LIN_PB
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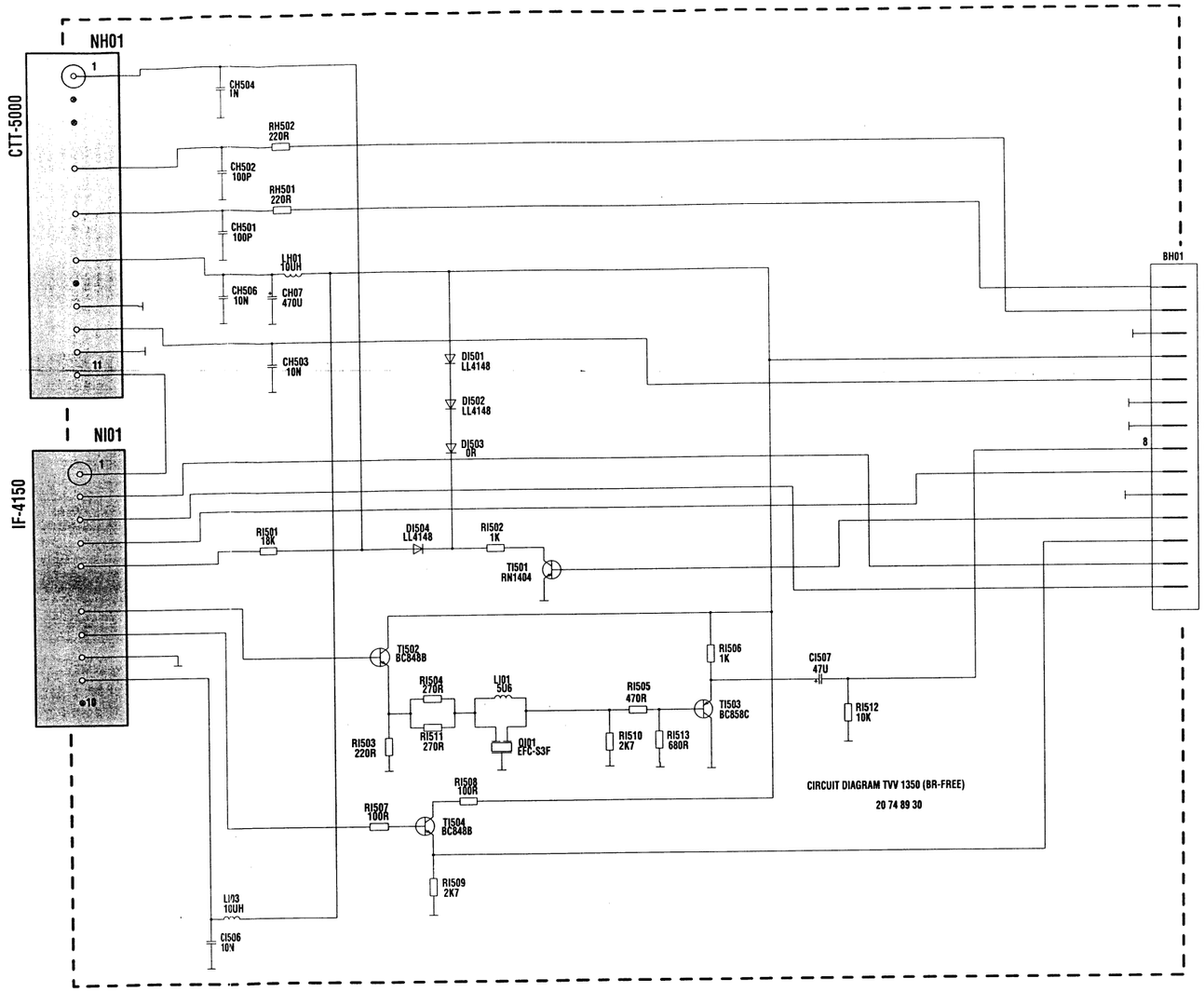
PB_ON
AUDIO_MUTE
A_LIN_REC


NH01
CTT-5000
CH504 1N
RH502 220R
CH502 100P
RH501 220R
CH501 100P
LH01 10UH
CH506 10N
CH07 470U
CH503 10N
NI01
IF-4150
DI501 LL4148
DI502 LL4148
DI503 0R
RI501 18K
DI504 LL4148
RI502 1K
TI501 RN1404
TI502 BC848B
RI504 270R
LI01 SUB
RI505 470R
RI506 1K
CI507 47U
RI512 10K
TI503 BC858C
RI503 220R
RI511 270R
OI01 EFC-S3F
RI510 2K7
RI513 680R
RI508 100R
RI507 100R
TI504 BC848B
RI509 2K7
LI03 10UH
CI506 10N
BH01
DATA
CLK
GND
+5V
+33V
GND
GND
CVBS
NORM SW
GND
AUTO PROG.
AF
BG/DK SW
L` SW
CIRCUIT DIAGRAM TVV 1350 (BR-FREE)
20 74 89 30

MC-Service